

In the Specification

Please make the following amendments that are provided by replacement paragraphs. The replacement paragraphs are identified by page and beginning line number. Marked-up versions of the amendments to the specification follow the remarks section of this response.

The paragraph on page 1, beginning on line 25:

A¹ Hydrogen gas production by the SRH method involves reacting a hydrocarbon feedstock with steam. In general, hydrocarbon feedstocks contain a variety of hydrocarbons, and the reaction chemistry proceeds according to ideal stoichiometric equations for each type of hydrocarbon. A variety of different reactions occur, depending upon the feedstock. The most important reactions can be generally categorized as:

- A. Dehydrogenation of cyclohexanes to yield aromatic hydrocarbons;
- B. Dehydrogenation of certain paraffins to yield aromatics;
- C. Isomerization including the conversion of straight-chain to branched chain carbon structures, such as octane to isooctane;
- D. Reformation of methane in natural gas to produce carbon dioxide and hydrogen; and
- E. Reformation of naptha to yield synthetic natural gas.

The paragraph on page 5, beginning on line 18:

A² One such embodiment of a mass flowmeter system comprises a hydrocarbon feedstock supply for supplying a hydrocarbon feedstock to the hydrogen gas production system. A steam supply is used to supply steam to the hydrogen production system. A mass flowmeter is operably connected to the hydrocarbon feedstock supply for measuring a hydrocarbon mass flow rate therein and for producing a hydrocarbon flow rate signal representing the hydrocarbon mass flow rate. A second flowmeter is operably connected to the steam supply for measuring a steam flow rate and for producing a steam flow rate signal representing the steam flow rate. A controller is operable for receiving the hydrocarbon flow rate signal and the steam flow rate signal. The controller has program instructions for controlling a ratio of the hydrocarbon feedstock and the steam delivered to the hydrogen production system.

The paragraph on page 7, beginning on line 11:

A³ Fig. 3 is a schematic diagram of process control instructions for use in a controller governing operation of the system shown in Fig. 2; and

In the Drawings

The Applicants are submitting new formal drawings with this response. The Applicants have amended FIGS. 1 and 3. On FIG. 1, the Applicants included the legend "PRIOR ART". On FIG. 3, step 304, the Applicants amended the word "Contenten" to --CONTENT--. The Applicants ask the Examiner to enter these amendments.